

REMARKS/ARGUMENTS

I. Status of Claims

Claims 1-18 are pending of which claims 1, 8, 13, 14, and 15 are independent. Claims 1, 8, 13 and 14 have been amended.

II. Double Patenting Rejection

Claim 1 is provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claim 1 of co-pending Application No. 10/658,208.

With regard to the Examiner's provisional double patenting rejections, Applicant respectfully requests the Examiner to hold these rejections in abeyance until all other patentability issues have been resolved. Should a double patenting rejection remain at that time, Applicants expect to file a Terminal Disclaimer(s) as necessary. Accordingly, the Examiner is kindly requested to withdraw the double-patenting rejection.

III. Rejections under 35 U.S.C. §103

Claims 1, 2, 3, 8, 9, 13, 15 and 17

Claims 1, 2, 3, 8, 9, 13, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jae-Huk Jang (UK Patent Application No. 2,347,588—hereinafter Jang) in view of Yamaguchi (U.S. Publication No. 2007/0206518—hereinafter Yamaguchi). Applicants respectfully traverse the rejection.

i. claim 1

Claim 1 recites a display apparatus for a mobile terminal for displaying a television video signal in the mobile terminal, comprising:

“control means for generating a plurality of commands for execution of a television mode and a communication mode and first user data corresponding to a television picture being displayed;

a tuner for receiving a television signal of a selected channel;

a decoder for decoding the television signal received by said tuner to separate it into said television video signal, an audio signal and synchronous signals;

video processing means for, in said television mode, converting said video signal from said decoder into digital video data, processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period and then outputting said first user data and, in said communication mode, stopping operations of said tuner and decoder and outputting second user data generated in said communication mode from said control means; and

display means having first and second display areas, said display means displaying said frame video data and said first user data from said video processing means respectively in said first and second display areas in said television mode, and displaying said second user data from said video processing means in said first and second display areas in said communication mode.” (emphasis added).

In particular, claim 1, recites a video processing means for, in the television mode, “converting said video signal from said decoder into digital video data, *processing and storing the converted digital video data on a frame basis* and outputting stored video data of a previous frame in a frame period”. In essence, according to claim 1, after a TV signal is converted from video signal into digital video data, the converted digital video data is **processed and stored on a frame basis**, and **stored video data of a previous frame** is then outputted. Hence, when digital video data of a current frame is generated, the claimed video processing means stores the digital video data of the current frame and outputs the stored digital video data of a previous frame.

By contrast, the TV phone disclosed in Jang uses an entirely different scheme to display a TV signal. The Examiner relies on page 12, lines 22-25 of Jang as disclosing the above-quoted claimed subject matter. However, page 12, lines 22-25 of Jang, along with its surrounding text, shows the exact contrary to the Examiner’s

assessment. To illustrate, the Examiner is kindly directed to the section starting on page 12, line 22 and ending on page 3, line 3, which is reproduced as follows:

“The ADC 42 converts the selected video signals R, G, and B into digital signals that are applied to a timing control section 44. The timing control section 44, which includes a synchronizing signal generator for generating a pseudo-vertical synchronizing signal and a pseudo-vertical H synchronizing signal, drives a TFT-LCD 46 by the video data signals input thereto from the ADC 42 to allow any image to be displayed on a screen thereof.” (emphasis added).

As clearly taught in Jang, after the video signals is converted into digital signals by ADC 42, the digital signals are then applied to a timing control section 44, which then drives the LCD 46 by the video data signals coming out of the ADC 42 so as to display the image on a screen. What are noticeably missing in Jang’s video display scheme is “processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period”, as recited in claim 1. To be more specific, with Jang’s scheme, the converted digital video data is never stored on a frame basis before gets outputted to a screen. Further, with Jang’s scheme, it is always the video data converted from currently received video signals, rather than stored video data of a PREVIOUS frame, as recited in claim 1, that gets displayed.

Accordingly, Jang does not disclose, teach, or suggest “processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period”, as recited in claim 1.

In addition, nowhere does not Jang disclose, teach, or suggest “first user data corresponding to a television picture being displayed”, as recited in claim 1, much less a video processing means for “outputting said first user data”, as recited in claim 1, and a display means “displaying said frame video data and said first user data from said video processing means respectively in said first and second display areas in said television mode”, as recited in claim 1. As clearly shown in Fig. 3A and Fig. 3B of

Jang (see page 17, lines 2-10 and page 17, line 21 to page 18, line 3 of Jang), the data displayed below TV image are **received text messages, rather than “first user data corresponding to a television picture being displayed”**, as recited in claim 1.

Accordingly, Jang also does not disclose, teach, or suggest “first user data corresponding to a television picture being displayed”, as recited in claim 1, a video processing means for “outputting said first user data”, as recited in claim 1, and a display means “displaying said frame video data and said first user data from said video processing means respectively in said first and second display areas in said television mode”, as recited in claim 1.

Yamaguchi is merely cited as a secondary reference for allegedly disclosing display means having first and second display areas. However, Yamaguchi does not cure the deficiencies of Jang with respect to “processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period”, as recited in claim 1, and with respect to “first user data corresponding to a television picture being displayed”, as recited in claim 1.

Accordingly, claim 1 is allowable over Jang and Yamaguchi, and the rejection of claim 1 should therefore be withdrawn.

ii. **claim 8**

Claim 8 contains similar recitation to “processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period”, as recited in claim 1. Specifically, claim 8 recites “***storing*** the video data of ***the current frame*** and first user data corresponding to said selected channel in a memory unit, outputting video data of ***a previous frame*** stored in said memory unit to said video data display area of said display unit”.

Accordingly, for at least reasons similar to what is discussed above in connection with claim 1, Jang does not disclose, teach, or suggest “storing the video data of the current frame and first user data corresponding to said selected channel in a memory unit, outputting video data of a previous frame stored in said memory unit to said video data display area of said display unit”, as recited in claim 8.

In addition, for at least reasons similar to what is discussed above in connection with claim 1 with respect to “first user data corresponding to a television picture being displayed”, Jang also does not disclose, teach, or suggest “first user data corresponding to said selected channel”, as recited in claim 8.

On the other hand, the secondary reference Yamaguchi is merely cited as a secondary reference for allegedly disclosing displaying the stored said second user data. Yamaguchi, however, does not cure the deficiencies of Jang discussed above in connection with claim 8. Accordingly, claim 8 is allowable over Jang and Yamaguchi, and the rejection of claim 8 should therefore be withdrawn.

iii. claim 13

Claim 13 contains similar recitation to “processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period”, as recited in claim 1. Specifically, claim 13 recites “*storing* video data of a *current frame* received over said selected channel and first user data corresponding to said selected channel in a memory, outputting video data of a *previous frame* stored in said memory to said video data display area of said display unit in a frame period.”

Accordingly, for at least reasons similar to what is discussed above in connection with claim 1, Jang does not disclose, teach, or suggest “storing video data of a current frame received over said selected channel and first user data corresponding to said selected channel in a memory, outputting video data of a

previous frame stored in said memory to said video data display area of said display unit in a frame period”, as recited in claim 13.

In addition, for at least reasons similar to what is discussed above in connection with claim 1 with respect to “first user data corresponding to a television picture being displayed”, Jang also does not disclose, teach, or suggest “first user data corresponding to said selected channel”, as recited in claim 13.

On the other hand, the secondary reference Yamaguchi is merely cited as a secondary reference for allegedly disclosing scaling video data and displaying the stored said second user data. Yamaguchi, however, does not cure the deficiencies of Jang discussed above. Accordingly, claim 13 is allowable over Jang and Yamaguchi, and the rejection of claim 13 should therefore be withdrawn.

iv. claim 15

Claim 15 contains the same recitation as “processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period”, as recited in claim 1.

Accordingly, for at least the same reasons discussed above in connection with claim 1, Jang does not disclose, teach, or suggest “processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period”, as recited in claim 15.

In addition, claim 15 contains the same recitation as “first user data corresponding to a television picture being displayed”, as recited in claim 1. Hence, for at least the same reasons in connection with claim 1, Jang also does not disclose, teach, or suggest “first user data corresponding to a television picture being displayed”, as recited in claim 15.

On the other hand, the secondary reference Yamaguchi is merely cited as a secondary reference for allegedly disclosing displaying said frame video data and said second user data in said first and second display areas. Yamaguchi, however, does not cure the deficiencies of Jang discussed above. Accordingly, claim 15 is allowable over Jang and Yamaguchi, and the rejection of claim 15 should therefore be withdrawn.

v. claims 2, 3, 9 and 17

The rejection of claims 2, 3, 9 and 17 should be withdrawn by virtue of their dependency from allowable claims 1, 8 and 13 respectively.

Claims 4-7, 10-12, 14 and 18

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jang in view of Yamaguchi, and in further view of Ng (U.S. Patent No. 6,681,285—hereinafter Ng).

Further, claims 5, 6, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jang in view of Yamaguchi, and in further view of Barile (U.S. Publication No. 2002/0093531—hereinafter Barile).

Still further, claims 7, 12, 14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jang in view of Yamaguchi, in further view of Barile, and still further view of Yui et al. (Patent No. 6,885,406—hereinafter Yui).

Still further, claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jang in view of Yamaguchi and in further view of Yui.

Applicants respectfully traverse the rejections.

i. Claims 14 and 18

Claim 14 contains similar recitation to “processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period”, as recited in claim 1. Specifically, claim 14 recites “*storing* video data of a *current frame* received over said selected channel and first user data corresponding to said selected channel in a memory, outputting video data of *a previous frame* stored in said memory to said video data display area of said display unit in a frame period”.

Accordingly, for at least reasons similar to what is discussed above in connection with claim 1, Jang does not disclose, teach, or suggest “*storing* video data of a *current frame* received over said selected channel and first user data corresponding to said selected channel in a memory, outputting video data of *a previous frame* stored in said memory to said video data display area of said display unit in a frame period”, as recited in claim 14.

In addition, for at least reasons similar to what is discussed above in connection with claim 1 with respect to first user data corresponding to a television picture being displayed”, Jang also does not disclose, teach, or suggest “first user data corresponding to said selected channel”, as recited in claim 14.

On the other hand, the secondary references Yamaguchi, Barile and Yui are merely cited for allegedly disclosing features other than the features discussed above which Jang does not disclose, teach, or suggest. However, none of Yamaguchi, Barile and Yui cure the deficiencies of Jang discussed above. Accordingly, claim 14 is allowable over Jang, Yamaguchi, Barile and Yui, and the rejection of claim 14 should therefore be withdrawn.

The rejection of claim 18 should be withdrawn by virtue of its dependency from allowable claim 14.

ii. claims 4-7 and 10-12

Claims 4-7 and 10-12 depend from independent claims 1 and 8 respectively, and thus inherit all the limitations from claims 1 and 8 respectively. As discussed above, neither Jang nor Yamaguchi discloses, teaches, or suggests “processing and storing the converted digital video data on a frame basis and outputting stored video data of a previous frame in a frame period”, as recited in claim 1 and similarly recited in claim 8, “first user data corresponding to a television picture being displayed”, as recited in claim 1, and “first user data corresponding to said selected channel”, as recited in claim 8.

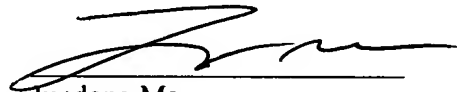
The secondary references Ng, Barile and Yui are merely cited for allegedly disclosing secondary features. Ng, Barile and Yui, however, do not cure the deficiencies of Jang and Yamaguchi discussed above. Accordingly, Applicants do not need to further discuss Ng, Barile and Yui in relation to the patentability of claims 4-7 and 10-12, and claims 4-7 and 10-12 should be allowable over Jang, Yamaguchi, Ng, Barile and Yui. The rejection of claims 4-7 and 10-12 should therefore be withdrawn.

IV. Conclusion

In view of the above, it is believed that this application is in condition for allowance and notice to this effect is respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the telephone number indicated below.

Should any/additional fees be required, the Director is hereby authorized to charge the fees to Deposit Account No. 18-2220.

Respectfully submitted,



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